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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/758,573

01/10/2001

Kendyl A. Roman

9422

7590

12/15/2003

Kendyl A. Roman

730 Bantry Court

Sunnyvale, CA 94087-3402

EXAMINER

TUNG, KEE M

ART UNIT

PAPER NUMBER

2676

DATE MAILED: 12/15/2003

2

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/758,573

Applicant(s)

ROMAN, KENDYL A.

Examiner

Kee M Tung

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 5-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grimsrud (6,651,113) in view of Kobayashi et al (4,550,437 hereinafter "Kobayashi").

Grimsrud teaches a method of increasing image processing performance by copying image data between a memory (20) includes a buffer (36) and an I/O memory (14) by a DMA circuitry (22) controls data transfers between the main memory (20) and data source (14, such as, hard disk, internet connection, satellite receiver and the like, see col. 3, lines 4-7). However, Grimsrud fails to explicitly suggest or teach the I/O memory (14) is a RAM. Kobayashi teaches an image data processing system (Fig. 1) comprising an input device (ITV camera 5, it is noted that if the output data from camera is an analog signal, the analog data will be converted into digital data by a digitizer before stored into the image memory which feature is inherent in the art); an output device (monitor 4); an I/O RAM (image memory 3); an image processing apparatus (2) for processing image data and a supervising processor (1). It would have been obvious to one of ordinary skill in the art at the time the present invention was made to combine the teachings of I/O RAM of Kobayashi into the system of Grimsrud to replace the

slower hard disk of Grimsrud by the fast RAM of Kobayashi and in order to increase the speed of memory access and thus to obtain high speed and high performance image processing system. Therefore, at least claims 1, 5 and 10-18 would have been obvious.

As per claims 6-9, the combined system fails to explicitly teach the how the image data is being copy. It would have been obvious to one of ordinary skill in the art at the time the present invention was made to modify the teachings of copy and/or transfer functions of Grimsrud in order to add the flexibility to the system by providing different copy function. Therefore, at least claims 6-9 would have been obvious.

3. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grimsrud (6,651,113) and Kobayashi et al (4,550,437 hereinafter "Kobayashi") as applied to claim 1 above, and further in view of Wada (5,959,639) or Anderson et al (6,338,119 hereinafter "Anderson").

The teachings of Grimsrud and Kobayashi are given in previous paragraph of this Office action. However, the combined system fails to explicitly teach a L1 and L2 cache memory. It was old and well known and well used in the art to include a L1 and a L2 cache memory in order to speed up the system processing by access data locally from the cache instead of main memory. Furthermore, both Wada and Anderson teach a L1 and L2 cache memory. Wada teaches a L1 (not shown, but inherent because he suggests a L2 cache, the L1 is inside the MPU) and Anderson teaches a L1 (104) and a L2 (106). It would have been obvious to one of ordinary skill in the art at the time the present invention was made to combine the teachings of Wada or Anderson into the combined system of Grimsrud and Kobayashi in order to provide fast access to the

storage device and thus improves the overall system performance. Therefore, at least claims 2-4 would have been obvious.

4. Claims 19 -21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grimsrud (6,651,113) and Kobayashi et al (4,550,437 hereinafter "Kobayashi") as applied to claim 16 above, and further in view of Cullen et al (6,592,629 hereinafter "Cullen").

The teachings of Grimsrud and Kobayashi are given in previous paragraph of this Office action. However, the combined system fails to explicitly teach said processor executes programs to enhance, compress/decompress, encrypt/decrypt, or reformat said image data. These are what Cullen teaches. Cullen teaches remote document image storage and retrieval system for a multifunctional peripheral comprising a workstation (630) and a multifunction machine (140) includes a compress/decompress (252), an encrypt (253) and decrypt (254). It would have been obvious to one of ordinary skill in the art at the time the present invention was made to combine the teachings of Cullen into the combined system of Grimsrud and Kobayashi in order to reduce overall storage space and provide fast and secure transmitted over the bus or network as taught by Cullen (col. 5, lines 16-63). Therefore, at least claims 19 and 20 would have been obvious.

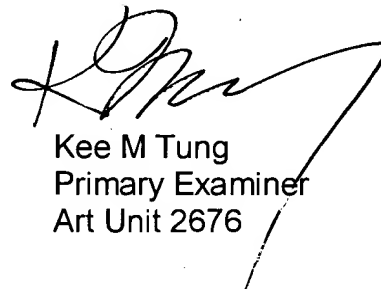
Claim 21 is similar in scope to the combination of claims 1, 10-12 and 19-20, and thus is rejected under similar rationale.

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kee M Tung whose telephone number is 703-305-9660. The examiner can normally be reached on Tuesday - Friday from 5:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 703-308-6829. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.



Kee M Tung  
Primary Examiner  
Art Unit 2676